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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/631,877

07/31/2003

Jes Tougaard Gram

CU-3620

1811

26530

7590

12/06/2006

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EXAMINER

HECKENBERG JR, DONALD H

ART UNIT

PAPER NUMBER

1722

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/631,877	<b>Applicant(s)</b> GRAM, JES TOUGAARD	
	<b>Examiner</b> Donald Heckenberg	<b>Art Unit</b> 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 08 November 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 11-29 is/are pending in the application.
- 4a) Of the above claim(s) 1-4 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☒ Certified copies of the priority documents have been received in Application No. 09/355,448.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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1. Claims 1-4 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made without traverse in the reply filed on 28 April 2006.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 11-13, 15, 20-25, 27 and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Pub. No. 2-143819 (previously made of record in the I.D.S. filed by Applicant; hereinafter "JP '819"). Note the English abstracts for this reference also made of record with this Office Action.

JP '819 discloses an injection molding device. The mold comprises a front part having a front profile and a back part having a back profile. See Fig. 1. The mold also includes a middle part 1 having a middle profile, with the middle part disposed between the front and back parts in the closed position. See Figs. 1 and 2. The middle part can rotate 180

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degrees about an axis that is perpendicular to relative to a movement direction of the front and back mold parts. Compare Figs. 1 and 2.

The front and middle parts of JP '819 are alignable together to form a perimeter of a first cavity substantially bounded by the front and middle profiles when paired together. See Fig. 1 showing first position of mold. A sub-unit molded product 2a comprising a shape having a front complementary profile and a middle complementary profile can be formed by filling the first cavity with molding material.

The back and middle parts of JP '819 are also alignable together when the sub-unit molded product is attached to the middle part to form a perimeter of a second cavity substantially bounded by the middle complementary profile and the back profile. See Fig. 2 showing second position of mold. An assembled object comprising a second shape 2b having the front complementary profile and the back complementary profile is formed by filling the second cavity with a molding material that merges with the sub-unit molded product. Note, as the middle part retains the sub-unit molding product during the rotation between the molding steps, the middle part must inherently have some hold-down mechanism to retain the product.

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Several of the claims refer to the particular molding materials which are to be used with the claimed molding apparatus. Claim 21, for example, defines the substrate molding material to be from the group of thermoplastic materials, elastomers, silicon plastic, and metal. It is well settled that the intended use of an apparatus is not germane to the issue of patentability of the apparatus. If the prior art structure is capable of performing the claimed use, then it meets the claim limitations. In re Casey, 370 F.2d 576, 580, 152 USPQ 235, 238 (CCPA 1967); In re Otto, 312 F.2d 937, 939, 136 USPQ 458, 459 (CCPA 1963); MPEP 2115. Further, expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining the patentability of the apparatus claim. Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). In this case, JP '819 discloses an injection molding apparatus with all of the structural features defined in the claims, and which is capable of operating with plastic type molding materials as defined in the claims. The reference therefore anticipates the claims, regardless of the specifically defined uses.

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4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 14, 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '819 in view of Sorensen (U.S. Pat. No. 4,400,341).

JP '819 discloses the molding apparatus as described above. JP'819 does not disclose the mold parts as having several profiles. The addition of profiles to injection molding parts,

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however, is known in the art as demonstrated by Sorensen. See Fig. 1A and corresponding description. Such additional profile allow for multiple products to be molded simultaneously. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to have modified the device of JP '819 as such to have the mold parts comprise additional profiles because this would allow for multiple products to be molded simultaneously. Note further, generally the duplication of a known part for a multiplied effect has no patentable significance unless it can be shown that there is a new and unexpected result. See In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960); St. Regis Paper Co. v. Bemis Co., Inc., 549 F.2d 833, 193 USPQ 8 (7th Cir. 1977).

7. Claims 18, 19, 26 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP '819 in view of Watanabe et al. (U.S. Pat. No. 5,196,213; previously of record).

JP '819 discloses the molding apparatus as described above. JP '819 does not show the middle part as having an ejector mechanism. Watanabe, however, discloses that ball-screw mechanism ejector mechanisms are known in the art for the purpose of taking molded articles off and out of mold parts. See cl. 1, ll. 13-36. Therefore, it would have been obvious to one

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of ordinary skill in the art at the time of Applicant's invention to have modified the apparatus disclosed by JP '819 as such to have the middle part further comprise a ball-screw ejector mechanism because such structures are known to allow for the discharge of molded articles from the mold parts as suggested by Watanabe.

8. Applicant's arguments with respect to claims 11-29 have been considered but are moot in view of the new grounds of rejection.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any



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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald Heckenberg whose telephone number is (571) 272-1131. The examiner can normally be reached on Monday through Friday from 9:30 A.M. to 6:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached at (571) 272-1316. The official fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <<<http://pair-direct.uspto.gov>>>. Should you have questions

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on access to the Private PAIR system, contact the Electronic  
Business Center (EBC) at (866) 217-9197 (toll-free).



Donald Heckenberg  
Primary Examiner  
A.U. 1722

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